CycleOps POWER

**Indoor Cycle Assembly Service Manual**
**Pro Series:**

- 400 Pro
- 300 Pro
- 200 Pro
- 100 Pro

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## CHAPTER 1:UNPACKING THE CYCLEOPS INDOOR CYCLE

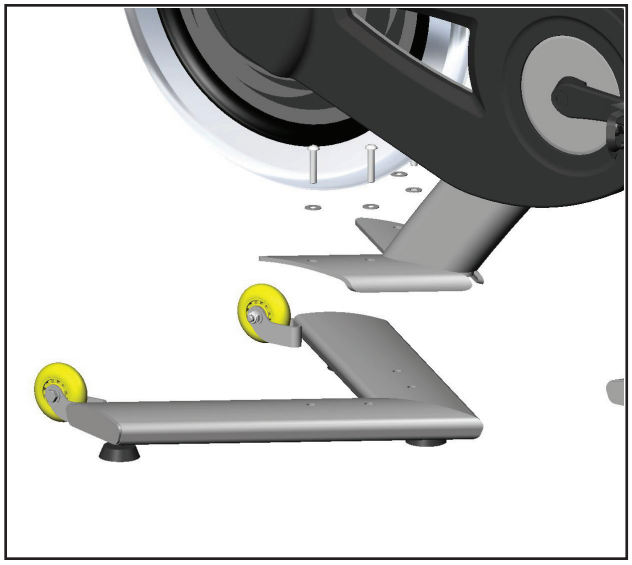
Place the box upright and cut the plastic binding straps. Lift the top of the box to expose the Indoor Cycle and packaging. Remove all parts from the box and foam inserts and ensure all the following parts are included:

| Part | Qty |
|---|---|
| Stabilizer front | 1 |
| Stabilizer rear | 1 |
| Main bike assembly | 1 |
| Handlebar tube | 1 |
| Seat post tube | 1 |
| Saddle w/ clamp | 1 |
| Seat assembly | 1 |
| Handlebar | 1 |
| Water bottle holder | 1 |
| Pedal set | 1 |
| IP hardware kit | 1 |
| Stabilizer bolts | 8 |
| Stabilizer bolt washers | 8 |
| Console Bracket bolts | 2 |
| Water bottle spacer | 1 |
| 4mm Spacer bolts | 2 |
| Multi-purpose wrench | 1 |
| 5mm allen wrench | 1 |
| 4mm allen wrench | 1 |
| Console Bracket w/ screw | 1 |
| Console (400 Pro, 300 Pro, 200 Pro) | 1 |

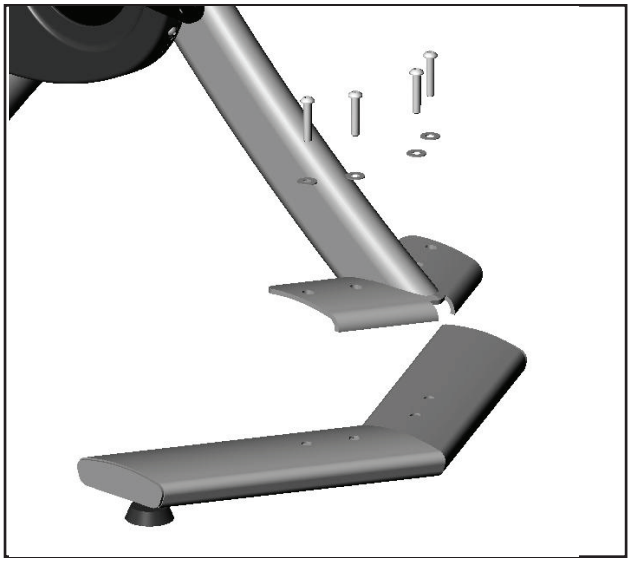
## CHAPTER 2: BIKE ASSEMBLY

### Step 1: Attach Stabilizer Feet

1. Note the difference between the front and rear stabilizer feet. The larger foot with wheels goes in the rear of the IC.
2. Align the rear base of the frame with the rear stabilizer and secure it with four 6mm bolts with washers. NOTE: Tighten the inner bolts first, and then proceed to the outer bolts to ensure the foot is secured properly and evenly.
3. Repeat with the front stabilizer.

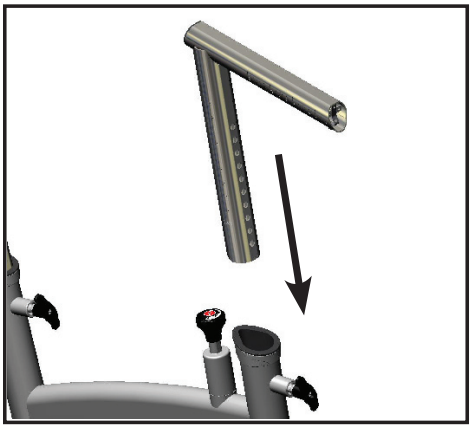


Rear Stabilizer Feet

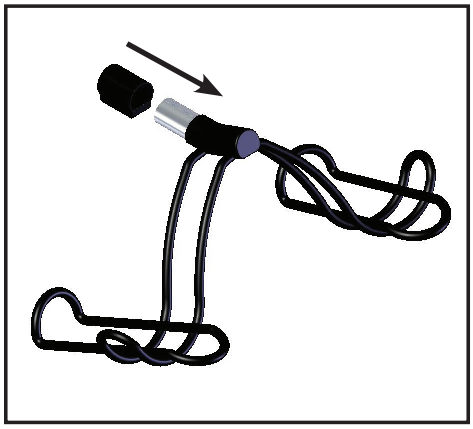


Front Stabilizer Feet

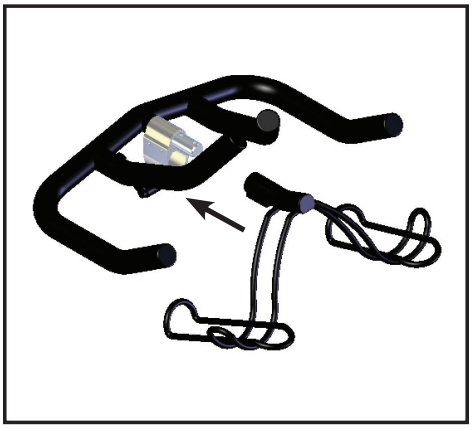
## Step 2: Attach Handlebars



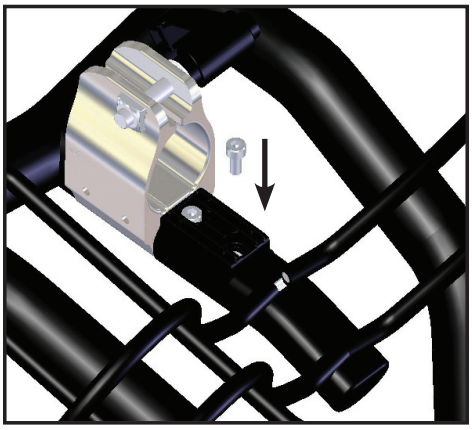
Insert the Handlebar post into the head tube and secure it using the L-handle.



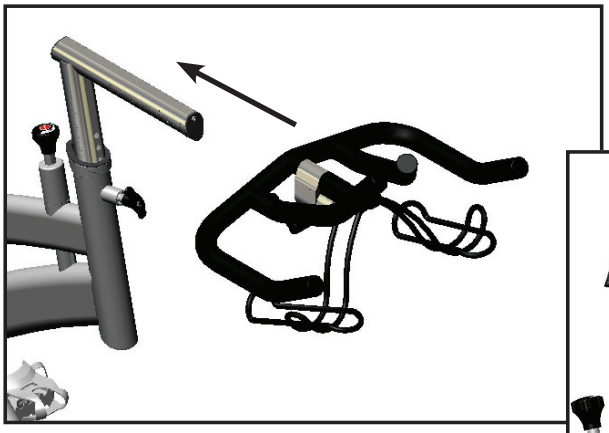
Slide the plastic shim onto the D-shaped tube on the water bottle holder.



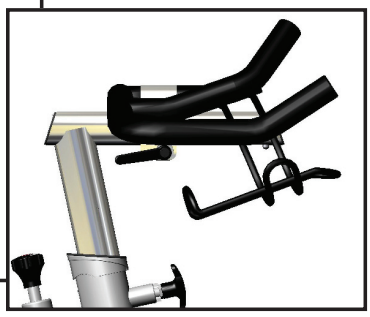
Slide the water bottle holder and plastic spacer onto the handlebar assembly.



Secure the water bottle holder and spacer to handlebar assembly using 2- 4mm allen bolts

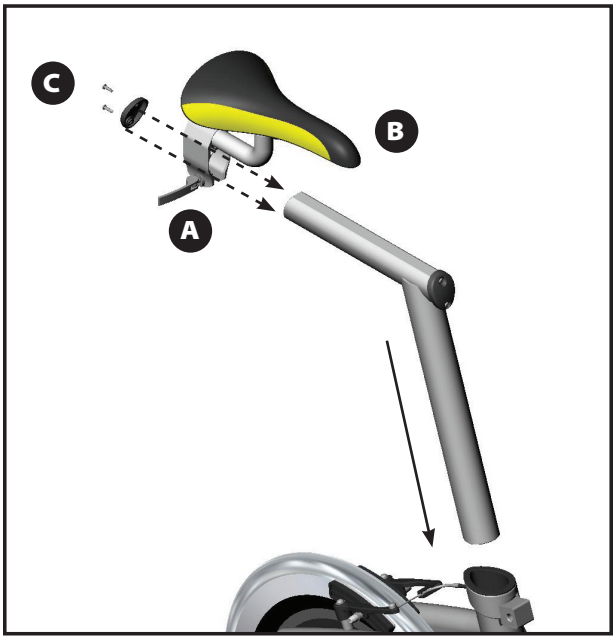


Carefully slide the handlebar onto the handlebar post.



Once the handlebar is in place, secure it with the L-shaped tension handle.

## Step 3: Seat Assembly

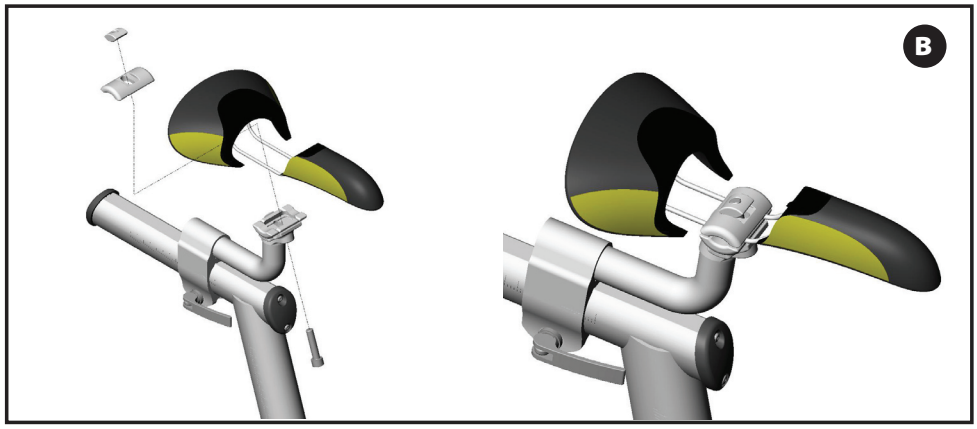



A. Loosen the L-handle on seat clamp assembly on the seat tube.

B. Attach the saddle to the seat post clamp, using a 6mm Allen wrench. Make sure both rails of the saddle are properly seated in the clamp and tighten the 6mm Allen bolt. If desired, any standard bicycle saddle can be attached to the CycleOps Indoor Cycle. Ensure the saddle is level and parallel to the floor for optimum comfort. The seat may need tighening after first few uses.

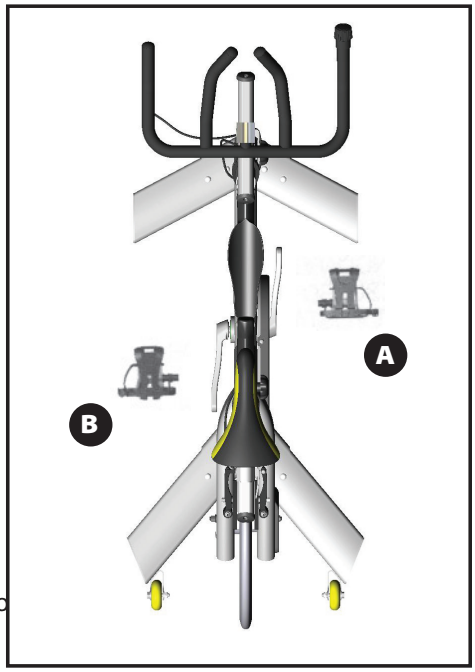
C. Once the Saddle is level and properly tightened in the clamp, attach the plastic end cap with two of the included screws.

D. In some instances, a shorter seat post is required for individuals under five feet tall. You can replace the standard seat clamp mechanism with part # 16616. Contact Saris Cycling Group to order this part. Follow the instructions provided with that part for installation.




**Step 4: Attach Pedals**

The CycleOps IC includes a standard pedal set; however, to mimic the fit and feel of your own bike you may also attach your own pedals per the manufacturers' specifications. Note that pedals are designed to be installed specifically on the right or left-hand side of the IC. Improper installation can result in damage to the crank. Damage caused by improper crank installation is not covered under warranty.




Attach your pedals onto the bike with a pedal wrench. Typically, each pedal is marked with an "R" or an "L" on the very end of the spindle past the threads. This mark indicates which side of the bike the pedal is intended to mount on. This is important since the thread directions are different for each pedal.

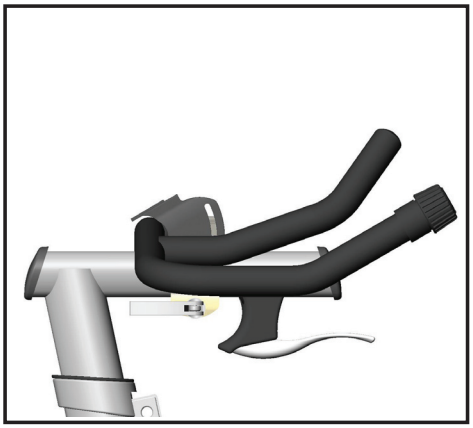
A. Locate the pedal that has the "R" on the spindle. This pedal is for the right side crank arm of the bike (chain guard side) and is right hand threaded (turn clockwise to tighten).

B. Locate the pedal that has the "L" on the spindle. Turn the spindle left (counter-clockwise) to tighten as the "L" spindle is reverse threaded.

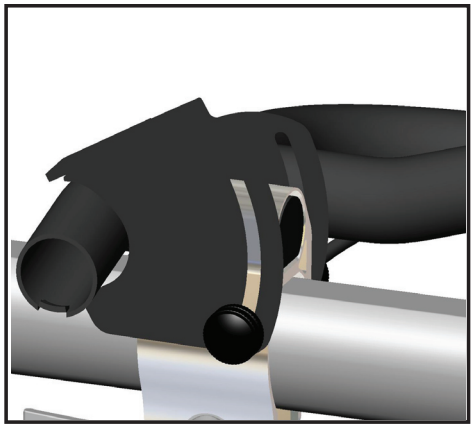
**Step 5: Attach Console Bracket and Console (If applicable)**

Bracket

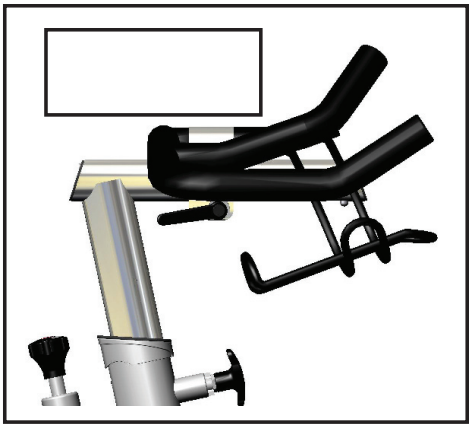
When first setting up the CycleOps IC you must attach the console bracket to the bike. To do this, follow the instructions below:



Place bracket onto the handlebars as shown.



Insert screws through console bracket, handlebar bracket, and tighten together.



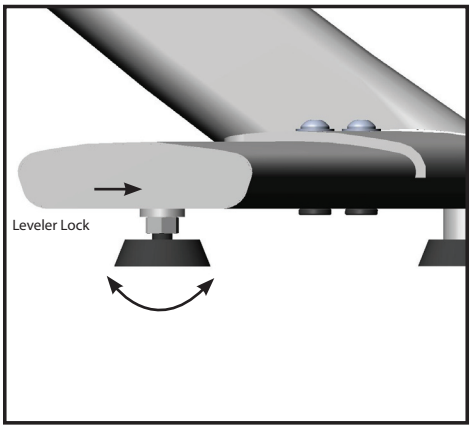
Slide the console down completely down onto the bracket. To ensure a solid connection between the console and the bracket make sure the contact points between the console and bracket remain clean and free from moisture or debris.

**Batteries:** The console ships with batteries. In the event the batteries need to be replaced over time, follow these simple steps:

Remove the back cover with a small Phillips-head screwdriver.
Remove batteries.
Replace with fresh AAA batteries, paying attention to properly line up the +/- poles.
Replace battery door and secure with small Phillips-head screwdriver.

**Leveling the bike**

Once the above assembly instructions have been followed, move the bike to where it will be used and level it properly. To level the bike, adjust the leveling feet underneath the stabilizers until there is no rocking or movement of the bike. It is important to level the bike for long term care.




You can secure the feet by tightening the leveler locks.

## IMPORTANT! How To Zero Torque

The torque must be zeroed to ensure that the console displays the most accurate power information. If the instantaneous power is positive or negative, the torque needs to be zeroed. These operations must be done with NO tension on the chain and with NO force being placed on the pedals. Also, the transmission icon must be illuminated.

To zero torque, first ensure the transmission icon is showing. Then press [DOWN ARROW] to move the cursor to [WATTS]. Press [SELECT] to change to [INCH-LBS]. Then hold down [SELECT] again until "0" is shown (about 10 seconds). Press [SELECT] to return to [WATTS]. The torque value will now read zero.

If the torque does not zero on the first attempt after ~10 seconds, repeat the procedure.

## CHAPTER 3: GENERAL USE

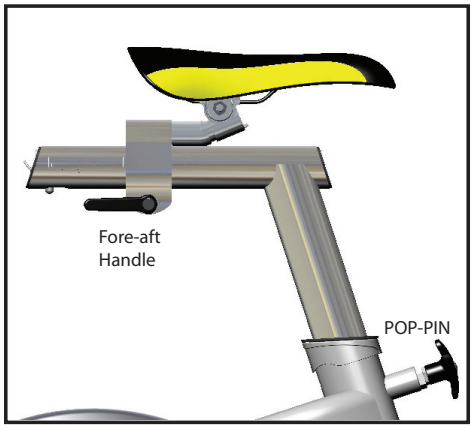
The CycleOps Indoor Cycle is easy to use. Simply sit on the cycle, tighten the pedal straps and begin cycling. The CycleOps indoor cycle allows the user full control over resistance by simply adjusting the resistance knob. Typically, lower resistance levels enable you to pedal at a faster pace, placing increased demand on the cardiovascular system. Higher resistance levels will typically deliver a greater muscle/endurance workout at lower RPMs. RPM parameters in the program range from 60-110 RPM.

Additionally, the indoor cycle offers seat and handlebar adjustments, allowing the CycleOps indoor cycle to be configured to each user's comfort zone.

This section provides the instructions for making seat adjustments, handlebar adjustments, pedal strap adjustments, and for controlling resistance.

**Seat Adjustments**

Proper seat height helps ensure maximum exercise efficiency and comfort, while reducing the risk of injury. Adjust the seat height so that the knee joint is slightly flexed when the extended leg is at the bottom of the pedal stroke. Once the proper height has been achieved, adjust the seat forward or back so that when the feet are in the 3 o'clock and 9 o'clock positions, the knees are directly over the pedal spindle.

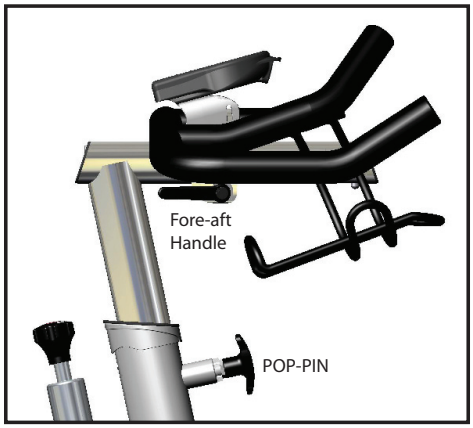



**To adjust the seat height:**

Dismount the cycle. Turn the seat height pop-pin counterclockwise and pull out on the pin to release it from its current preset location. Raise or lower the seat to the desired height, then gently release the pop-pin. Raise or lower the seat slightly, if necessary, until the pop-pin engages a preset hole. Turn the pop-pin clockwise to secure.

**To adjust the seat horizontal position:**

Dismount the indoor cycle. Loosen the seat fore-and-aft tension handle by turning the handle counterclockwise. Move the seat forward or back to the desired position, then tighten the tension handle by turning clockwise. Be sure to tighten the handle firmly.




**Handlebar Adjustments**

Proper position for the handlebar is based primarily on comfort. Typically, the handlebar should be positioned even with or slightly higher than the seat.

Dismount the indoor cycle  Turn L-handle counterclockwise to release it from its current preset location. Raise or lower the handlebar to the desired height, then tighten L-handle. Turn the L-handle clockwise to secure.

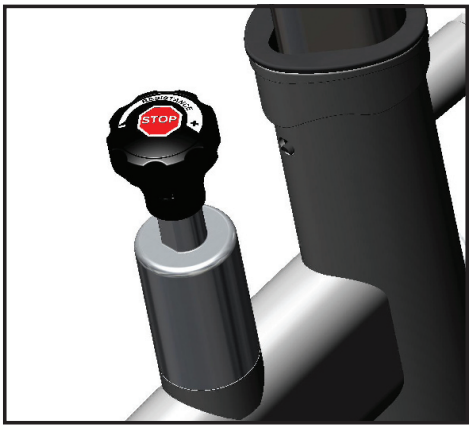
**To adjust the handlebar horizontal position:**

Dismount the indoor cycle. Loosen the handlebar fore-and-aft tension handle by turning the handle counterclockwise. Move the handlebar forward or back to the desired position, then tighten the tension handle by turning clockwise. Be sure to tighten the handle firmly. As a general guideline, handlebar fore-and-aft can be determined by placing one's elbow on the nose of the saddle and extending the fingers straight. Adjust handlebar fore-and-aft until the fingertips touch the handlebar near the stem and tighten.

**Pedal Strap Adjustment**
The pedal straps should be adjusted to hold the foot snugly in the pedal.

**To adjust the pedal straps:**
Place each foot in the toe clip until the ball of the foot is over the pedal axle. The front of the shoe may not completely fill the toe cage. Rotate the pedals until one foot is within arms reach, then tighten the webbed cloth buckle until the cage of the toe clip is snug around the foot. Repeat for the other foot. Point your toes and knees directly forward to ensure maximum pedal efficiency.

**Resistance Control**
Pedaling resistance is controlled by the resistance knob located behind the handlebar. Resistance adjustments can be made while riding to vary the intensity of your workout.




**To adjust pedaling resistance:**
To increase resistance, turn the knob clockwise (+); to decrease resistance, turn the knob counterclockwise (-).

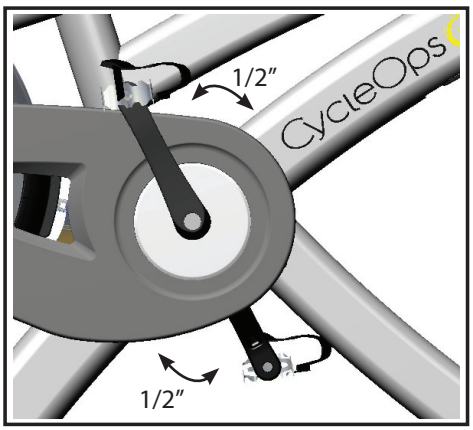
In case of emergency, you may press directly down on the knob to bring the flywheel to an abrupt stop.

## CHAPTER 4: COMMON ADJUSTMENTS

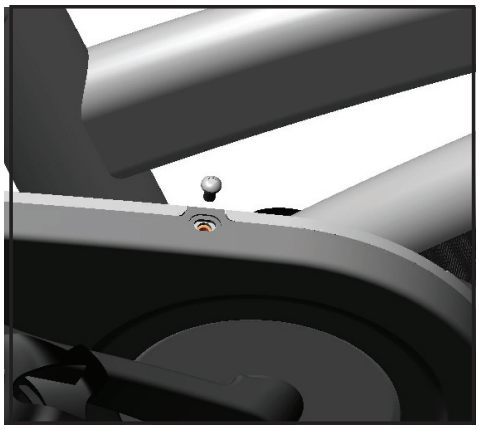
**Flywheel Adjustment**

Chain tension/Flywheel Alignment

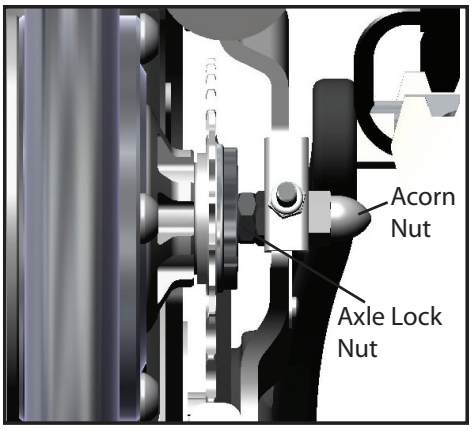
Over time, the chain on your CycleOps IC will stretch due to the load applied to it. The following instructions will aid you in properly tensioning the chain and aligning the flywheel in the frame of the CycleOps IC. CAUTION: Improper chain adjustment will cause premature wear and may void the warranty. ** CAUTION: NEVER put hands into or near the drive train while it is motion! **



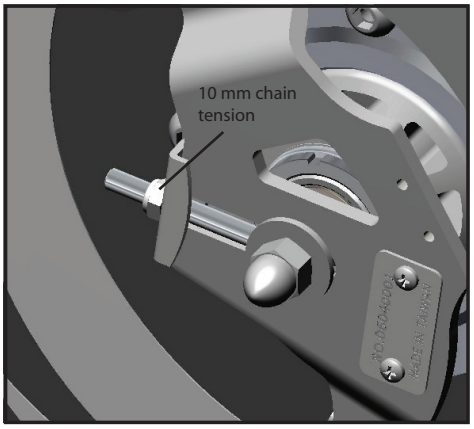

Move the crank arms back and forth. If there is more than 1/2" movement in the chain before the flywheel rotates, the chain needs to be re-adjusted.



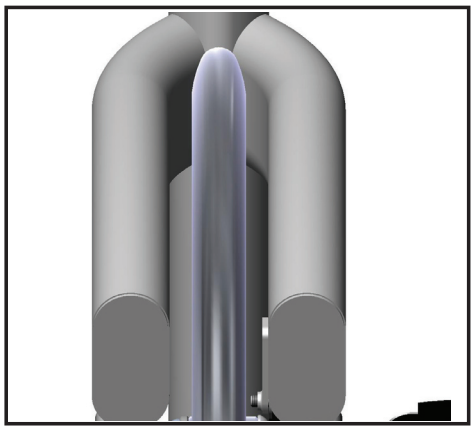
Using a 3mm Allen wrench, remove the chain guard bolts (3).




Use a 17mm cone wrench to hold the axle locking nuts into place. Do not turn the wrench, it is only to be used as a stabilizer. With your other hand, use a 15mm box wrench to loosen the acorn nuts on the axle. Repeat this process on each side of the flywheel.




Once the acorn nuts are loose, you can adjust the alignment of the flywheel as well as the chain tension. Using a 10 mm box wrench, adjust the tensioning hardware until the desired chain tension is achieved evenly on both sides.



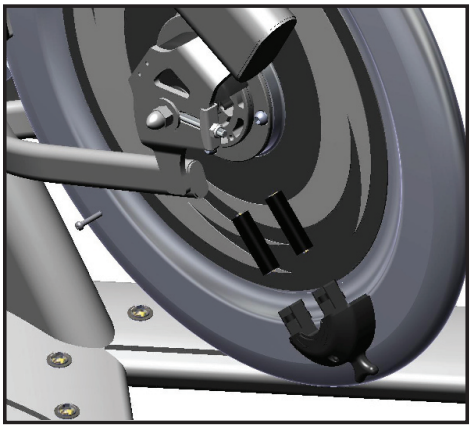
Check the alignment of the flywheel against the seat post of the CycleOps IC. Once the proper tension had been achieved and the flywheel is properly aligned, tighten the Acorn nuts to 75 in-lbs.

NOTES:

Be sure to make small adjustments to the drive train. Adjust both sides of the tensioning hardware. Only adjusting one side will lead to improper flywheel alignment and unwanted drive train wear and/or noise. Adjusting the tension/alignment is a difficult task and improper adjustment can lead to premature chain/cog wear. This is not covered under warranty. The chain tension has been adjusted properly when there is little or no play felt when the pedals are rocked back and forth.

**Replacing Hub Batteries 400 Pro/300Pro (AA type)**

Over time, the batteries that power the electronics in the hub will need to be changed. The split battery cap on the Club Pro 300PT flywheel was designed to make this task as easy as possible. When it is necessary to change the hub batteries, follow these steps:



Rotate the flywheel to a position where you can access the Allen bolt on the handle side of the battery cap.
Using a 2.5 mm Allen wrench, remove the screw on the battery cap.
Pull the plastic battery cap out via the molded handle.
Replace the batteries, paying close attention to properly line up the +/- poles.
Replace the battery cap and tighten the set screw.

NOTE: If you have a wired console, the hub requires 2 E90 batteries. Using a 2.5 mm Allen wrench, remove the side of the plastic battery cap with the "teeth." Replace the batteries, paying close attention to properly line up the +/- poles. Replace the battery cap and tighten the set screw.

**Replacing Sensor Batteries Comp 200E**

**Over time, the 3 volt lithium battery in the speed/cadence sensor in the COMP 200E indoor cycle will need to be changed. Follow these steps to change speed/cadence sensor battery:**

**1.** Using a 3mm Allen wrench, remove the three chain guard bolts.
**2**. Remove the chain guard.

Fig. 1 – Remove chain guard

**3**. Using a 5 mm Allen wrench, remove the bolt for the bracket arm that holds the speed/cadence sensor.

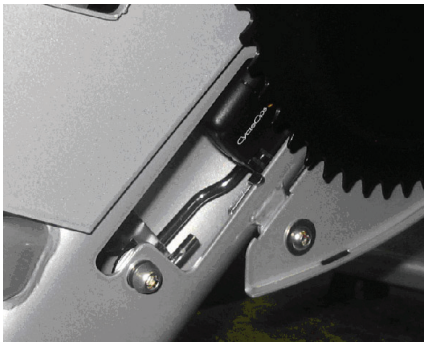


Fig. 2 – Remove Bolt

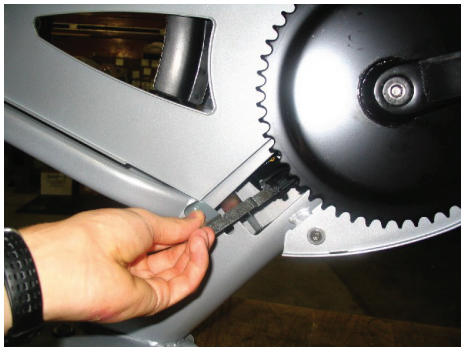


Fig. 3 – Slide Sensor Out of Frame

**4.** Using a quarter, remove the battery cover on the back of the sensor by turning counterclockwise approximately one half turn.
**5.** Replace the battery.

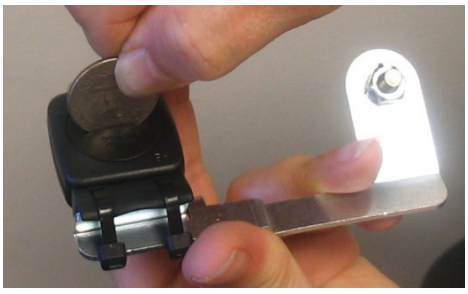


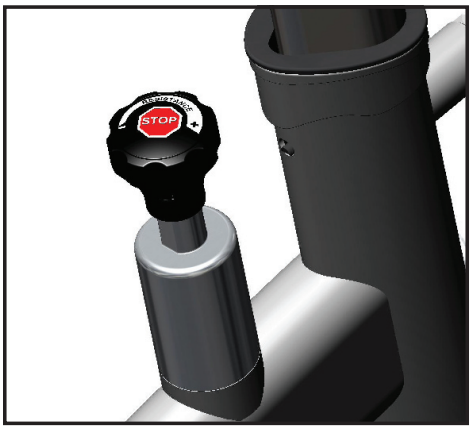
Fig. 4 – Remove Battery Cover

Fig. 5 – Battery

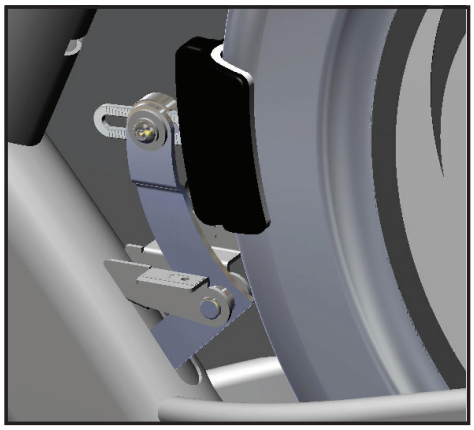
**6.** Reattach the bracket arm and the speed/cadence sensor inside indoor cycle frame.

NOTE: After replacing the battery, the indoor cycle console must relearn the coded ID for the speed/cadence sensor. Refer to the Indoor Cycle Console Manual for instructions (available at www.cycleops.com).

**Brake Adjustment**
The brake mechanism on your CycleOps indoor cycle has been adjusted at the factory. However, over time due to chain stretch and brake pad wear, it may need to be adjusted. To replace/adjust brake pad, use the following procedure:




Back off resistance until it the knob stops turning (counter-clockwise). Then turn clockwise 180 degrees (1/2 turn)



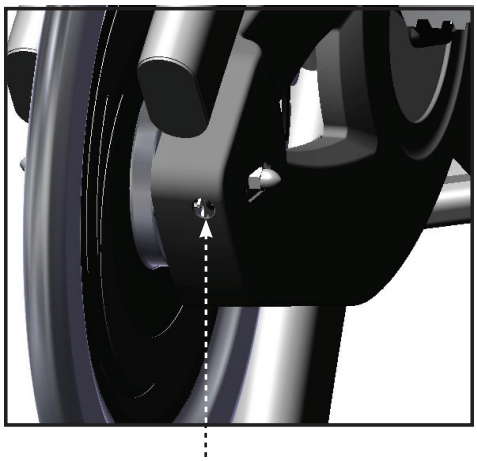
Loosen the clamping bolt with an Allen wrench (*Note, early models use a 4mm bolt, later models use a 5mm bolt). Be sure to note the orientation of all necessary hardware.
Align the brake pad by sliding it towards the flywheel. Stop when the pad just touches the flywheel. Note that you must align the arc of the brake pad with the arc of the flywheel.

Tighten clamping bolt to 50 in-lbs.

When properly adjusted, the Indoor cycle should register around 30 watts at 90rpm with no resistance applied (can only be validated on Club Pro 300PT)

## CHAPTER 5: LUBRICATION

**Chain**
Over time, the chain on your indoor cycle will require additional lubrication. It is recommended that you lube the chain every six months to maximize chain life.
To lubricate the chain on your indoor cycle, use the lubrication port that is at the back of the chain guard Liberally spray a Teflon-based lubricant onto the chain.
Be sure each link gets lube. Be careful not to over-lubricate the chain as excess lube will drip out of the chain guard and can stain floors/carpet.


Lube Port

**Nuts & Bolts**
It is recommended that you put a light coating of lithium grease on the threads of the following hardware to ensure proper tightening and to prevent the parts from seizing over time:
•Stabilizer bolt threads
•Rubber feet threads
•Pull-pin threads
•Pedal spindle threads

**Preventative Maintenance**
Performing necessary preventative maintenance is key to keeping your CycleOps IC in proper working condition. Following these recommended maintenance procedures will help extend the life of your CycleOps IC.

DAILY
Wipe Down/Cleaning:
After your ride, be sure to release all tension from the resistance mechanism. Wipe down the entire unit using an absorbent cloth. A standard bicycle polish can be used on the painted parts of the IC. Focus on areas where sweat can settle. Give particular attention to the following:
• Handlebar
• Seat/Seat tube
• Flywheel
• Frame
• Chain Guard
• Resistance Knob
• Handlebar Tube
• Stabilizers

**Never use abrasive cleaning liquids or petroleum-based solvents when wiping down the bicycle.

Inspection/Adjustment:
Inspect the CycleOps IC for any loose parts, nuts, bolts, etc. Pay special attention to the following:
• Pedals
• Seat Assembly bracket
• Handlebar assembly bracket
• Crank arms – tighten to 75 in-lbs.

WEEKLY
Perform all daily maintenance recommendations. In addition:
• Inspect screws on console bracket. Tighten if necessary.
• Inspect and properly tighten brake pads.
• Properly tighten pedals and all hardware attaching toe clips/straps (if applicable)
• Inspect handlebar clamp assembly.
• Inspect seat clamp assembly. Tighten clamp bolt if necessary
• Inspect stabilizer feet. Tighten if necessary.
• Inspect flywheel. Check for proper alignment. Tighten acorn locking nuts to 75 in-lbs.
• Inspect crank/bottom bracket interface. Tighten to 75 in-lbs

MONTHLY
• Perform all Daily and Weekly maintenance recommendations. In addition:
• Perform thorough cleaning of the CycleOps IC. This includes:
• Remove handlebar tube and seat tube and clean both the stainless steel tube as well as inside the plastic sleeve. Inspect sleeves for scoring. Replace if no longer properly securing vertical adjustment.
• Clean the underside of the stabilizer feet.
• Remove console bracket and clean the handlebar assembly
• Clean the flywheel with mild detergent or a damp cloth
• Check the chain tension to ensure that the chain is properly adjusted. See "Adjusting the Chain Tension" for instructions
• Inspect plastic sleeves for damage. Replace if necessary.
• Inspect brake pads for wear. Replace pads if there is less than 2mm of felt pad exposed.
• Lube the drive train. See "Lubrication" for instructions.

## CHAPTER 6: ELECTRONICS

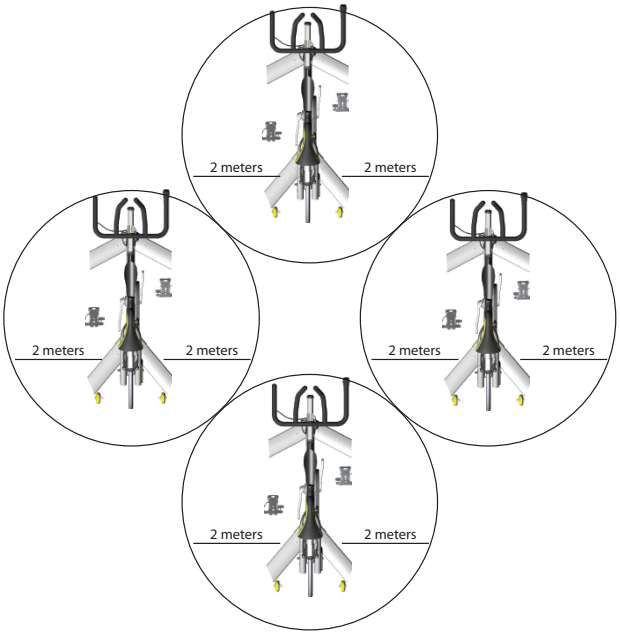
SPECIFICATIONS
Accuracy +/-1.5% (400 Pro/300Pro)
Signal Transmission Digital RF
Operational Temperature 0 to 40 degrees c or 32 to 104 f
Battery Life (Hub) 1000 hours approx.
Battery Life (Console) 100 hours approx.
Battery Type (Hub) AA type 1.5 volt 2 ea)
Battery Type (Console) AAA type, 1.5 volt (3 ea)
Freehub fixing bolt torque 400-450 inch-lbs.

## CHAPTER 7: RF INTERFERENCE:

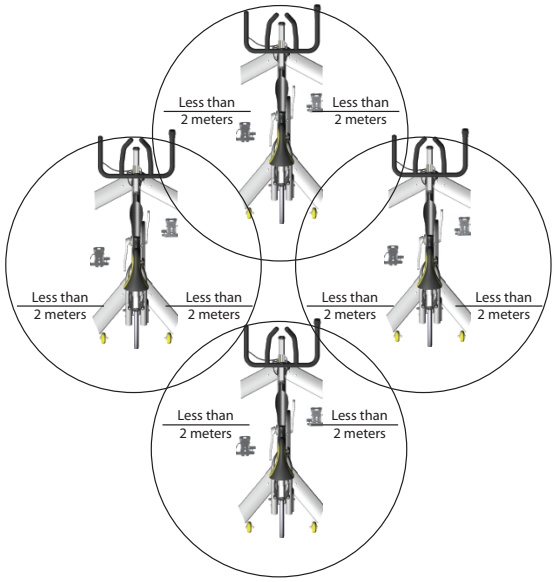
If during use you are experiencing wireless drop out this is due to frequency interference. Wireless Internet access points, microwaves, cordless phones, or other wireless devices may cause frequency interference. To mitigate the chance of interference set wireless access points to the lowest channel possible, and keep bikes away for interfering devices. To change the channel on your access point, please consult your manufacturers documentation or your technology staff.

CycleOps utilizes ANT+ technology to ensure a robust and reliable connection between the various sensors used in our products. Sensors are defined as power meter sensors, heart rate strap sensors, cadence sensors, speed sensors, and controlled resistance sensors. However, there is a limit to the number of sensors that can operate in a given environment. Practically speaking, when riding by yourself or with others using less than 30 total ANT+ sensors you should see no more than a 1% loss in data due to communication errors in your sensors. However, in an environment with more than 30 total ANT+ sensors you may see an increase in communication errors.

Optimal Indoor Cycle Configuration for Wireless Communication in Group Environment




Undesirable Indoor Cycle Configuration for Wireless Communication in Group Environment


Less than 2 meters
Less than 2 meters
Less than 2 meters
Less than 2 meters
Less than 2 meters
Less than 2 meters
Less than 2 meters
Less than 2 meters

## CHAPTER 8: WARRANTY

Frame - Lifetime
Parts - 3 years (excludes wear items)
Electronics - 1 year

Saris Cycling Group, Inc. warrants its PowerTap products against defects in manufacturing and workmanship for a period of one year, beginning at the date of purchase, or from the date of manufacture in the absence of a proof of purchase. In the event of a warranty issue, Saris Cycling Group, Inc. will repair or replace the item at its discretion. Saris Cycling Group, Inc. is not responsible for any indirect or consequential costs or damages associated with the warranty of the product. Our products are not covered under warranty in cases exhibiting signs of abuse, improper maintenance or installation, crash, using the product with non-compatible components, or using the product for purposes for which it was not designed. This warranty is also void if the product has been modified from its original form, including changes in aesthetics, serial numbers or logos. Saris Cycling Group Inc., is not responsible for basic hub maintenance, such as re-packing bearings and bearing adjustments. Warranty Procedures If it appears that a PowerTap component is not working properly, please take the time to inspect and troubleshoot the system as best as possible. In many instances, solutions may be as simple as replacing a bearing or adjusting a sensor. Often small parts can repaired at the shop, instead of the longer and more expensive option of sending the unit back for repair. If you feel the need to warranty your PowerTap, please return your product through the channel that you purchased it from or contact Saris Cycling Group, Inc. at 1-800-783-7257.

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Modifications
Saris Cycling Group, Inc reserves the right to make improvements and/or updates to the products described herein at any time without notice.

FCC Statement of Compliance:
Statement of Compliance for FCC and Industry Canada:
"This device complies with Industry Canada and Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.
Changes or modifications to this device not expressly approved by the party responsible for compliance with FCC regulations (the manufacturer) could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a normal installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation